

Title (en)

ANTIFUNGAL PAENIBACILLUS STRAINS, FUSARICIDIN-TYPE COMPOUNDS, AND THEIR USE

Title (de)

FUNGIZIDE PAENIBACILLUS-STÄMME, FUSARICIDINARTIGE VERBINDUNGEN UND DEREN VERWENDUNG

Title (fr)

SOUCHE DE PAENIBACILLUS ANTIFONGIQUES, COMPOSÉS DE TYPE FUSARICIDINE ET LEUR UTILISATION

Publication

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Application

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Abstract (en)

[origin: WO2016020371A1] The present invention relates to novel isolated bacterial strains, which are members of the genus Paenibacillus, originally isolated from soil and showing antagonistic activity against a broad range of pathogens and being capable of producing antimicrobial metabolites. It was found that the strains Lu16774 and Lu17007 belong to a novel subspecies named Paenibacillus polymyxa ssp. plantarum while the strain Lu17015 belongs to a novel species which is proposed to be Paenibacillus epiphyticus. The present invention also relates to microbial pesticide compositions comprising at least one of such novel bacterial strains, whole culture broth or a cell-free extract or a fraction thereof or at least one metabolite thereof, and/or a mutant of at least one of said novel bacterial strains having all the identifying characteristics of the respective bacterial strain or whole culture broth, cell-free extract, fraction and/or metabolite of the mutant thereof showing antagonistic activity against plant pathogens. The present invention also relates to a method of controlling or suppressing plant pathogens or preventing plant pathogen infections by applying such composition. The present invention also relates to novel fusaricidin-type compounds which are metabolites produced by the strains of the present invention.

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